Contents Volume 4 1981

Number 1, March 1981

Target Article

Denenberg, V. H. Hemispheric laterality in animals and the effects of early experience 1

Open Peer Commentary

Bradshaw, J. L. *Hemispheric laterality and an evolutionary perspective* 21
Bureš, J., Burešová, O., and Křivánek, J. *An asymmetric view of brain laterality* 22
Collins, R. L. *On asymmetries exhibiting a near-equiprobable distribution of directions* 23
Corballis, M. C. *On the evolution and growth of lateralization* 24
Ettlinger, G. *Cerebral predominance in the monkey?* 25
Geschwind, N. *The significance of lateralization in nonhuman species* 26
Giurgea, C. E. *How and why two brains?* 27
Lehman, R. A. W. *Lateralized asymmetry of behavior in animals at the population and individual level* 28
Levy, J. *Cross-species invariances and within-species diversity in brain asymmetry and questions regarding inferences about lateralization* 28
Milner, A. D. and Jeeves, M. A. *The functions of the corpus callosum in infancy and adulthood* 30
Myslobodsky, M. S. *Animal brain laterality: Functional lateralization or a right-left excitability gradient?* 31
Nelsen, J. M. and Goldstein, L. *Electrophysiological measures of hemispheric lateralities related to behavioral states in animals* 32
Puccetti, R. *Possible anatomic basis for cerebral dominance in infrahuman vertebrate species* 33
Robinson, D. N. *Conceptual aspects of "laterality" syndromes* 33
Robinson, T. E. and Becker, J. B. *Variation in lateralization: Selected samples do not a population make* 34
Rogers, L. J. *Environmental influences on brain lateralization* 35
Warren, J. M. *Laterality and natural selection* 36
Záborszky, L. *The corpus callosum and hemispheric lateralization* 37

Author's Response

Denenberg, V. H. *Population asymmetry and cross-species similarity* 38

Target Article

Bradshaw, J. L. and Nettleton, N. C. The nature of hemispheric specialization in man 51

Open Peer Commentary

Bertelson, P. *The nature of hemispheric specialization: Why should there be a single principle?* 63
Brownell, H. H. and Gardner, H. *Hemisphere specialization: Definitions, not incantations* 64
Bryden, M. P. and Allard, F. A. *Shortcomings of the verbal/nonverbal dichotomy: Seems to us we've heard this song before . . .* 65
Carmon, A. *Temporal processing and the left hemisphere* 66
Cohen, G. *Explaining hemispheric asymmetry: New dichotomies for old?* 67
Coltheart, M. *Right-hemisphere reading* 67
Cooper, W. E. *The analytic/holistic distinction applied to the speech of patients with hemispheric brain damages* 68
Corballis, M. C. *Toward an evolutionary perspective on hemispheric specialization* 69
Gainotti, G. *Clinical neuropsychology and the left-hemisphere dominance for language* 70
Harris, L. J. and Carr, T. H. *Implications of differences between perceptual systems for the analysis of hemispheric specialization* 71
Marshall, J. C. *Hemispheric specialization: What, how and why* 72
McKeever, W. F. *On laterality research and dichotomania* 73
Morgan, M. J. *Hemispheric specialization and spatiotemporal interactions* 74
Nottebohm, F. *Does hemispheric specialization of function reflect the needs of an executive side?* 75
Puccetti, R. *The alleged manipulospatiality explanation of right hemisphere visuospatial superiority* 75
Studdert-Kennedy, M. *Cerebral hemispheres: Specialized for the analysis of what?* 76
Tallal, P. *Temporal processing as related to hemispheric specialization for speech perception in normal and language impaired populations* 77
Wyke, M. A. *The nature of cerebral hemispheric specialisation in man: Quantitative vs. qualitative differences* 78

Authors' Response

Bradshaw, J. L. and Nettleton, N. C. *Double trouble: An evolutionary cut at the dichotomy pie* 79

Target Article

Puccetti, R. The case for mental duality: Evidence from split-brain data and other considerations **93**

Open Peer Commentary

Anderson, R. M., Jr. and Gonsalves, J. F. *Sensory suppression and the unit of consciousness* 99
Bogen, J. E. *Mental numerosity: Is one head better than two?* 100
Bradshaw, J. L. *In two minds* 101
Brown, J. W. *Structural levels and mental unity* 102
Churchland, P. S. *Quantifying minds: How many angels. . . ?* 103
Davidson, R. J. *Cognitive processing is not equivalent to conscious processing* 104
Eccles, J. C. *Mental dualism and commissurotomy* 105
Geschwind, N. *The perverseness of the right hemisphere* 106
Green, M. B. *May we forget our minds for the moment?* 107
Joynt, R. J. *Are two heads better than one?* 109
LeDoux, J. E. and Gazzaniga, M. S. *The brain and the split brain: A duel with duality as a model of mind* 109
Margolis, J. *Mental ascriptions and mental unity: Molar subjects, brains, and homunculi* 110
Marks, C. E. *Mental duality: An unmade case* 112
Robinson, D. N. *Neurometaphorology: The new faculty psychology* 113
Von Eckardt, B. *Puccetti's mental-duality thesis: A case of bad arguments* 114
Weinstein, E. A. *Extinction and hemi-inattention: Their relationship to commissurotomy* 114
Wilkes, K. V. *Unfused homunculi* 115

Author's Response

Puccetti, R. *Consensus and progress in brain science* 116

Target Article

Johnston, T. D. Contrasting approaches to a theory of learning **125**

Open Peer Commentary

Alley, T. R. and Shaw, R. E. *Principles of learning and the ecological style of inquiry* 139
Barlow, G. W. and Glickman, S. E. *A theory of learning – not even déjà vu* 141
Bateson, P. *Linking the biological functions and the mechanisms of learning: Uses and abuses* 142
Charlesworth, W. R. *An ecological approach toward a unified theory of learning* 142
Garcia, J. *The nature of learning explanations* 143
Ghiselin, M. T. *The relevance of phylogenetics to the study of behavioral diversity* 144
Gonzalez, R. C. and Yarczower, M. *On the* what *and* how *of learning* 145
Hailman, J. P. *Discussing learning: The quandary of substance* 146
Hinde, R. A. *Biological approaches to the study of learning: Does Johnston provide a new alternative?* 146
Kalat, J. W. *A funny thing happened on the way to comparative psychology* 147
Kamil, A. C. *Ecology and learning* 147
Kruse, J. and Reed, E. *The ecological approach to learning* 148
Lachman, J. L. and Lachman, R. *General process theory, ecology, and animal-human continuity: A cognitive perspective* 149
Logue, A. W. *Species differences and principles of learning: Informed generality* 150
Malone, J. C., Jr. *A fourth approach to the study of learning: Are "processes" really necessary?* 151
Nevin, J. A. *Learning theory: Behavioral artifacts or general principles?* 152
Petrinovich, L. *A functional view of learning* 153
Plotkin, H. C. and Odling-Smee, F. J. *Is an ecological approach radical enough?* 154
Rachlin, H. *Learning theory in its niche* 153
Revusky, S. *Known general principles of learning cannot be ignored* 156
Rozin, P. *Explaining diversity and searching for general processes: Isn't there a middle ground?* 157
Schleidt, W. M. *Adaptive modification of behavior: Processing information from the environment* 158
Schwartz, B. *The ecology of learning: The right answer to the wrong question* 159
Shettleworth, S. J. *An ecological theory of learning: Good goal, poor strategy* 160
Welker, W. *Missing variables in studies of animal learning* 161

Author's Response

Johnston, T. D. *An ecological approach to a theory of learning* 162

Number 2, June 1981

Target Article

Warren, R. M. Measurement of sensory intensity **175**

Open Peer Commentary

Anderson, N. H. *Cognitive algebra and sensation measurement* 189
Baird, J. C. *Psychophysical theory: On the avoidance of contradiction* 190
Birnbaum, M. H. *Limitations of the physical correlate theory of psychophysical judgment* 190
Curtis, D. W. *Direct judgments: Sensation or stimulus correlate?* 191

Dorfman, D. D. *Warren's physical correlate theory: Correlation does not imply causation* 192
Eisler, H. *Sensations, correlates and judgments: Why physics?* 193
Gescheider, G. A. *In defense of a sensory process theory of psychophysical scaling* 194
Hood, D. C. & Finkelstein, M. A. *On relating physiology to sensation* 195
Iverson, G. J. *A dialogue on loudness* 195
Lockhead, G. R. *Context affects measures of sensory intensity* 196
Luce, R. D. *Physical correlate theory: A question and a prediction* 197
Mansfield, R. J. W. *Sensory coding: The search for invariants* 198
Marks, L. E. *What (good) are scales of sensation?* 199
Mittenecker, E. *Distance – a physical correlate of brightness and loudness scaling?* 200
Pollack, I. *The experimental subject as an opportunist* 201
Poulton, E. C. *Schooling and the new psychophysics* 201
Rule, S. J. *Binocular brightness and physical correlate theory* 203
Scharf, B. & Hellman, R. *Objections to physical correlate theory, with emphasis on loudness* 203
Schneider, B. *Is the sensory code truly inaccessible?* 204
Teghtsoonian, R. *Logical difficulties in physical correlate theory* 205
Treisman, M. *Sensory scaling: A paradigm whose time has past* 206
Tumarkin, A. *A biologist looks at psycho-acoustics* 207
Uttal, W. R. *Messages, media and codes* 207
Ward, W. D. *Sensation: A relativist's view* 208
Warren, W. H., Jr. & Shaw, R. E. *Psychophysics and econometrics* 209
Wasserman, G. S. *The physics of light and the physical correlate theory of sensory scaling* 210
Yost, W. A. *Variability in the measurement of sensory intensity* 211
Zuriff, G. E. *Magnitude estimation: Why one of Warren's claims is correct* 212

Author's Response

Warren, R. M. *Sensation magnitude judgments are based upon estimates of physical magnitudes* 213

Target Article

Plotkin, H. C. & Odling-Smee, F. J. A multiple-level model of evolution and its implications for sociobiology **225**

Open Peer Commentary

Barkow, J. H. *The logical relation between cultural and biological evolution: On to the next question* 235
Campbell, D. T. *Levels of organization, selection, and information storage in biological and social evaluation* 236
Chase, I. D. *Social interaction: The missing link in evolutionary models* 237
Cloak, F. T., Jr. *On natural selection and culture* 238
Dewsbury, D. A. *Multiplicity of evolutionary or developmental processes?* 240
Eckberg, D. L. *Some problems with an "options" view of evolution* 241
Ghiselin, M. T. *Toward an individualistic ontology for cultural evolution* 242
Hull, D. L. *The essence of sociobiology* 242
Johnston, T. D. & Gottlieb, G. *Epigenesis and phylogenesis: Re-ordering the priorities* 243
Klopfer, P. H. *Criticizing sociobiology: It's all been said before* 244
Lenington, S. *The limits of natural selection* 244
Lewontin, R. C. *On constraints and adaptation* 244
Mundinger, P. C. *Evolution and populations* 245
Perzigian, A. J. *Genetics, evolution and cultural selection* 246
Peterson, S. A. *Linkage problems: Human genes and human culture* 247
Pulliam, H. R. *Culture and the evolution of learning* 247
Richerson, P. J. & Boyd, R. T. *The search for an alternative to the sociobiological hypothesis* 248
Ridley, M. *The leveller no. 1: Evolution, development, and culture* 249
Ruse, M. *Biology versus culture in human behaviour* 250
Ruyle, E. E. *Culture, protoculture, and the cultural pool* 251
Simon, M. A. *Is there really just one kind of evolution?* 252
Slobodkin, L. B. *The meaning of "evolutionary law"* 252
van den Berghe, P. L. *Multiple-level evolution: A disagreement to disagree* 253
Vetta, A. *Natural selection and sociobiology* 255
Wahlsten, D. *Indeterminancy is inherent in an inadequate model of evolution, not in nature* 255
Williams, G. C. *A defense of monolithic sociobiology and genetic mysticism* 257

Authors' Response

Plotkin, H. C. and Odling-Smee, F. J. *Possible mechanisms for a multiple-level model of evolution* 257

Target Article

Ghiselin, M. T. Categories, life, and thinking **269**

Open Peer Commentary

Bunge, M. *Biopopulations, not biospecies, are individuals and evolve* 284
Caplan, A. L. *Pick your poison: Historicism, essentialism, and emergentism in the definition of species* 285
Corning, P. A. *Rethinking categories and life* 286
Fink, W. L. *Individuality and comparative biology* 288
Heise, H. *Universals, particulars, and paradigms* 289
Hull, D. L. *Metaphysics and common usage* 290
Johnston, T. D. *"Species-typicality": Can individuals have typical parts?* 291

Jones, R. K. & Pick, A. D. *Categorization and affordances* 292
Keil, F. C. *Natural categories and natural concepts* 293
Kruskal, J. B. *What does Ghiselin mean by "individual?"* 294
Odling-Smee, F. J. & Plotkin, H. C. *Units "of" selection: The end of "of?"* 295
Packard, A. *Taxonomy is older than thinking: Epigenetic decisions* 296
Reed, E. S. *The demise of mental representations* 297
Rosenberg, A. *Typologies: Obstacles and opportunities in scientific change* 298
Ruse, M. *Species as individuals: Logical, biological, and philosophical problems* 299
Salthe, S. N. *The world represented as a hierarchy of nature may not require "species"* 300
Schwartz, S. P. *Natural kinds* 301
Wiley, E. O. *The metaphysics of individuality and its consequences for systematic biology* 302

Author's Response

Ghiselin, M. T. *Taxa, life, and thinking* 303

Number 3, September 1981

Target Article

Cohen, L. J. Can human irrationality be experimentally demonstrated? **317**

Open Peer Commentary

Blackburn, S. *Rational animal?* 331
Cohen, M. S. *Status of the rationality assumption in psychology* 332
Diaconis, P. & Freedman, D. *The persistence of cognitive illusions* 333
Einhorn, H. J. & Hogarth, R. M. *Rationality and the sanctity of competence* 334
Evans, J. St. B. T. & Pollard, P. *On defining rationality unreasonably* 335
Fischhoff, B. *Can any statements about human behavior be empirically validated?* 336
Glucksberg, S. *Can children's irrationality be experimentally demonstrated?* 337
Griggs, R. A. *Human reasoning: Can we judge before we understand?* 338
Henle, M. *Another vote for rationality* 339
Kahneman, D. *Who shall be the arbiter of our intuitions?* 339
Krantz, D. H. *Improvements in human reasoning and an error in L. J. Cohen's* 340
Kyburg, H. E., Jr. *Intuition, competence, and performance* 341
Lévi, I. *Should Bayesians sometimes neglect base rates?* 342
Lopes, L. L. *Performing competently* 343
Lycan, W. G. *"Is" and "ought" in cognitive science* 344
Mackie, J. L. *Propensity, evidence, and diagnosis* 345
Margalit, A. & Bar-Hillel, M. *The irrational, the unreasonable, and the wrong* 346
Niiniluoto, I. *L. J. Cohen versus Bayesianism* 349
Nisbett, R. E. *Lay arbitration of rules of inference* 349
Sampson, G. *Human rationality: Misleading linguistic analogies* 350
Skyrms, B. *Conditional probability, taxicabs, and martingales* 351
Smedslund, J. *Rationality is a necessary presupposition in psychology* 352
Sternberg, R. J. *Some questions regarding the rationality of a demonstration of human rationality* 352
Stich, S. P. *Inferential competence: Right you are, if you think you are* 353
Tversky, A. *L. J. Cohen, again: On the evaluation of inductive intuitions* 354
Wason, P. *The importance of cognitive illusions* 356
Weisberg, R. W. *Competence, performance, and ignorance* 356
Wetherick, N. E. *Cohen on contraposition* 358
Zabell, S. L. *Unphilosophical probability* 358

Author's Response

Cohen, L. J. *Are there any a priori constraints on the study of rationality?* 359

Target Article

Rachlin, H., Battalio, R., Kagel, J., & Green L. Maximization theory in behavioral psychology **371**

Open Peer Commentary

Allison, J. *Two cheers for maximization theory* 388
Baum, W. M. & Nevin, J. A. *Maximization theory: Some empirical problems* 389
Bolles, R. C. *Trouble in reinforcementland* 390
Fantino, E. J. *Is maximization theory general, and is it refutable?* 390
Hanson, S. J. *To maximize or not to maximize . . .* 391
Herrnstein, R. J. *A first law for behavioral analysis* 392
Houston, A. I. & Staddon, J. E. R. *Optimality principles and behavior: It's all for the best* 395
Keeley, M. C. *The microeconomics of nonhuman behavior* 396
Killeen, P. R. & Allen, C. M. *Maximization theory: The "package" will not serve as an atom* 397
Leslie, J. C. *Is operant conditioning ready for formal molar theories?* 398
Moffitt, R. A. *The power of maximization theory* 399
Motheral, M. S. *Ideal versus real worlds: Bliss points, time allocation and curve fitting* 400
Powers, W. T. *Maximization, or control?* 400

Rosen, H. S. *Rate and utility maximization: An economist's view* 401
Rowland, N. *Deprivation and maximization: Mixed feelings about Tom Collins et al.* 402
Schneider, H. K. *Economic psychology: From Descartes to Newton* 402
Thaler, R. H. *Maximization and self-control* 403
Timberlake, W. *Bliss points and utility functions* 404
Vaughan, W., Jr. *Reinforcement or maximization?* 405

Authors' Response

Rachlin, H., Battalio, R., Kagel, J. & Green, L. *Maximization theory vindicated* 405

Target Article

Bernstein, I. S. Dominance: The baby and the bathwater **419**

Open Peer Commentary

Abernethy, V. *Dominance, feminist hierarchies, and heterosexual dyads* 429
Altmann, S. A. *Dominance relationships: The Cheshire cat's grin* 430
Baenninger, R. *Dominance: On distinguishing the baby from the bathwater* 431
Banks, E. M. *Dominance and behavioral primatologists: A case of typological thinking?* 432
Bolles, R. C. *A parallel to dominance competition* 433
Brain, P. F. *The concept of dominance also has problems in studies on rodents* 434
Bramblett, C. A. *Dominance tabulation: Giving form to concepts* 435
Candland, D. K. & Hoer, J. B. *The logical status of dominance* 436
Chalmers, N. R. *Dominance as part of a relationship* 437
Eaton, G. G. *Measurement and utility of dominance rankings* 438
Flannelly, K. J. & Blanchard, R. J. *Dominance: Cause or description of social relationships?* 438
Gage, F. H. *Dominance: Measure first and then define* 440
Gauthreaux, S. A., Jr. *Behavioral dominance from an ecological perspective* 441
Hinde, R. A. & Datta, S. *Dominance: An intervening variable* 442
Kaplan, J. R. *A reexamination of dominance rank and hierarchy in primates* 442
Lott, D. F. *Circumstances in which exact dominance rank may be important* 443
Maxim, P. E. *Dominance: A useful dimension of social communication* 444
Petraitis, P. S. *Dominance rankings and problems of intransitive relationships* 445
Plutchik, R. *Dominance: A key ethological/sociobiological concept* 446
Sade, D. S. *Patterning of aggression* 446
Seyfarth, R. M. *Do monkeys rank each other?* 447
Smuts, B. *Dominance: An alternative view* 448
Vessey, S. H. *Dominance as control* 449

Author's Response

Bernstein, I. S. *Dominance relationships and ranks: Explanation, correlations, and empirical challenges* 449

Target Article

Vanderwolf, C. H. & Robinson, T. E. Reticulo-cortical activity and behavior: A critique of the arousal theory and a new synthesis **459**

Open Peer Commentary

Bennett, T. L. *Is a behaviorist's approach sufficient for understanding the brain?* 476
Buzsáki, G., Isaacson, R. L. & Hannigan, J. H., Jr. *Behavioral problems related to the interpretation of brain rhythms* 477
Callaway, E. *Can the decomposition of attention clarify some clinical issues?* 477
Carlson, N. R. *Is the distinction between Type I and Type II behaviors related to the effects of septal lesions?* 479
Eichenbaum, H. *A behaviorist in the neurophysiology lab* 480
Hirschman, G. *Is hippocampal theta an artifact?* 480
Jasper, H. H. *EEG, pharmacology, and behavior* 482
Jones, B. E. *Understanding the physiological correlates of a behavioral state as a constellation of events* 482
Komisaruk, B. R. & Semba, K. *Rhythmic modulation of sensorimotor activity in phase with EEG waves* 483
Krnjević, K. *Cellular mechanisms of cholinergic arousal* 484
Malmo, R. B. & Malmo, H. P. *Needed: More data on the reticular formation** (*This word was misprinted as "information" in BBS 4:3.) 485
Phillis, J. W. *Acetylcholine, amines, peptides, and cortical arousal* 486
Ranck, J. B., Jr. *An obituary for old arousal theory* 487
Rougeul, A., Bouyer, J. J., & Buser, P. *Significance of localized rhythmic activities occurring during the waking state* 488
Shiromani, P. & Fishbein, W. *Neocortical activation and adaptive behavior: Cholinergic influences* 488
Somjen, G. G. *Reticular formation, brain waves, and coma* 489
Steriade, M. *EEG desynchronization is associated with cellular events that are prerequisites for active behavioral states* 489
Sutherland, R. J., Whishaw, I. Q. & Kolb, B. *A ghost in a different guise* 492
Szerb, J. C. & Dudar, J. D. *Where does the cholinergic modulation of the EEG take place?* 493
Vertes, R. P. *An atropine-sensitive and a less atropine-sensitive system* 493
Villablanca, J. R. *Independent forebrain and brainstem controls for arousal and sleep* 494
Vinogradova, O. S. *Behaviorism and voluntarism* 496

Authors' Response

Vanderwolf, C. H. & Robinson, T. E. *Brain-behavioral studies: The importance of staying close to the data* 497

Number 4, December 1981

Target Article

Colby, K. M. Modeling a paranoid mind **515**

Open Peer Commentary

Abelson, R. P. *Going after PARRY* 534
Agassi, J. *Simulation?* 535
Carbonell, J. G. *Issues in computer modeling of cognitive phenomena: An artificial intelligence perspective* 536
Gunderson, K. *Paranoia concerning program-resistant aspects of the mind – and let's drop rocks on Turing's toes again* 537
Izard, C. E. & Masterson, F. A. *Colby's paranoia model: An old theory in a new frame?* 539
Kochen, M. *On the generality of PARRY, Colby's paranoia model* 540
Lindsay, R. *How smart must you be to be crazy?* 541
Magaro, P. A. & Shulman, H. G. *Colby's model for paranoia: It's made well, but what is it?* 542
Maher, B. A. *Testing the components of a computer model* 543
Miller, J. R. *PARRY and the evaluation of cognitive models* 543
Moor, J. *AI and cargo cult science* 544
Oatley, K. *Modeling paranoia: The cargo cult metaphor* 545
Pinkava, V. *The dichotomous predicament of contemporary psychology* 546
Reid, W. H. & Riedler, J. F. *Psychiatry and computers: An uneasy synthesis* 547
Revlin, R. *Evaluation of a model's test* 547
Sloman, A. *Deep and shallow simulations* 548
Swanson, D. W. *Is PARRY paranoid?* 548
Teller, V. & Dahl, H. *Clinical artificial intelligence* 549

Author's Response

Colby, K. M. *PARRYing* 550

Target Article

Le Magnen, J. The metabolic basis of dual periodicity of feeding in rats **561**

Open Peer Commentary

Armstrong, S. *Periodicity of nocturnal feeding in the rat: What the gut tells the brain or what the brain tells the gut* 575
Bellinger, L. L. *Endocrine effects on glucose and insulin periodicity* 576
Booth, D. A. *Can verbal theorising cope?* 576
Borer, K. T. *The neuroendocrine lipostat is not confined to the ventromedial hypothalamus* 577
Casper, R. C. & Schlemmer, R. F. *Bulimia is more than a form of hyperphagia* 578
Collins, B. J. *ATP, not glucose, is energy currency* 579
Davis, J. D. *Has a meal trigger been found?* 580
de Castro, J. M. *Feeding patterns and their control mechanisms* 581
Flatt, J. P. *Is food intake regulation based on signals arising in carbohydrate metabolism inherently inadequate for accurate regulation of energy balance on high-fat diets?* 581
Friedman, M. I. *Metabolic explanations of eating behavior* 583
Kanarek, R. B. *Some limitations of homeostatic explanations of feeding behavior* 584
King, B. M. *Relationship of hypothalamic obesity to hyperinsulinemia* 585
Mrosovsky, N. *Biological clocks, set points, and the primacy of regulated levels of fat* 585
Nunez, A. A. *Circadian pacemakers and feeding rhythms* 586
Panksepp, J. *On medial hypothalamic control of feeding* 587
Peck, J. W. *Depletion, repletion, and feeding by rats* 588
Ritter, R. C. *Preprandial hypoglycemia and hypothalamic chauvinism* 589
Rowland, N. *Feeding behaviour: Caused by, or just correlated with, physiology?* 589
Sclafani, A. *Correlation and causation in the study of feeding behavior* 590
Stricker, E. M. *Factors in the control of food intake* 591
Toates, F. M. *Towards a real systems theory of feeding* 592
Vigersky, R. A. *Feeding behavior and glucose homeostasis in male rats* 593
Waldbillig, R. J. *Failure of caloric regulation during feeding of high-fat diets: An anomaly rationalized with current concepts of glucoprivic feeding* 593

Author's Response

Le Magnen, J. *The study of feeding behavior is "physiology"* 594

Target Article

Gallistel, C. R. Précis of Gallistel's *The organization of action: A new synthesis* **609**

Open Peer Commentary

Arbib, M. A. *A new synthesis?* 619
Bolles, R. C. *On a clear day you can see behavior* 619
Chapple, W. *Independence and interaction in behavioral units* 620

Craske, B. *Oscillators in human motor systems* 621
Dev, P. *The reference trajectory as an organising principle* 622
Doty, R. W. *Nodes, notions and neuroscience* 622
Fentress, J. C. *Network foci in integrated action: Units or something else?* 623
Grillner, S. *"A new synthesis?"* 624
Hogan, J. A. *Hierarchy and behavior* 625
Hollerbach, J. M. *Effective procedures versus elementary units of behavior* 625
Jander, R. *Gems set into a base matrix* 627
Jeannerod, M. *Input–output relations in goal-directed actions* 628
Lewis, E. R. *Dynamic servomechanisms are more fun: A critical look at chapters 6 and 7 of* The organization of action 629
MacKay, D. G. *Behavioral plasticity, serial order, and the motor program* 630
Mackintosh, N. J. *Where's the action?* 631
Milner, P. M. *A small fly in some beneficial ointment* 632
Nashner, L. M. *Hierarchical structures in the organization of motor behaviors* 633
Newell, A. *A basis for action* 633
Olton, D. S. *Behavioral flexibility and the organization of action* 634
Provine, R. R. *Giving behavior to psychology* 635
Reed, E. S. *Can mental representations cause behavior?* 635
Reynolds, P. C. *Behavior ignored* 637
Roitblat, H. L. *Gallistel's metatheory of action* 637
Timberlake, W. *The education of behaviorism and the nature of learning* 638

Author's Response

Gallistel, C. R. *Matters of principle: Hierarchies, representations, and action* 639